



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,197	08/21/2003	Hideo Ohira	501152.20020	7088

7590

11/03/2004

Eugene LeDonne
Reed Smith, LLP
29th Floor
599 Lexington Avenue
New York, NY 10022

EXAMINER

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,197

Applicant(s)

OHIRA ETAL.

Examiner

Veronica F. Faison

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 9-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 14, 2004.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to ink composition, classified in class 106, subclass 31.27.
- II. Claims 9-14, drawn to ink jet recording apparatus, classified in class 347, subclass 20+.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and apparatus. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the apparatus for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different apparatus (MPEP § 806.05(h)). In the instant case the product may be used in a materially different apparatus such as a fountain pen.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant's election with traverse of Group I in the reply filed on October 14, 2004 is acknowledged. The traversal is on the ground(s) that Invention II is not a process, but rather a product. This is not found persuasive because although Applicant is correct that the claims of Group II are not a process of use but rather an apparatus. However it is the position of the Examiner that the ink composition may be used in a materially different apparatus such as a fountain pen.

The requirement is still deemed proper and is therefore made FINAL.

Preamble

The preamble limitation "for ink-jet recording" is of no consequence when a composition is the same. Ultimate intended utility does not make a composition patentable. See *In re Pearson*, 181 USPQ 6411.

Claim Objections

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4 is directed to a container which shuts out oxygen, which does not further limit the ink composition of claim 1 for which claim 4 depends.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1-5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Blease et al (US Patent 6,585,362).

Blease et al disclose an ink composition comprising a colorant and an aqueous carrier wherein the ink composition has a dissolved gas content of less than 3 ppm as measured on the basis of the amount of dissolved oxygen gas at 20°C and a static surface tension at 25°C of greater than 34 dynes/cm (34 mN/m) (abstract and col. 3 lines 41-49). The colorant present in the composition may be a water-soluble dye, a pigment or any other type of colorant (col. 3 line 50+). The reference further discloses that the aqueous carrier is water or a mixture of water and at least one water miscible co-solvent (col. 5 lines 10-12). A surfactant may be added to the ink to adjust the surface tension to an appropriate level, wherein the surfactant is present in the amount of 0.01 to 1 percent by weight (col. 6 lines 31-36). The reference further discloses that the typical ink composition comprises 0.05 to 20 percent by weight of colorant, 20 to 95 percent by weight of water, 5 to 70 percent by weight of humectant, 2 to 20 percent by weight of co-solvent, 0.1 to 10 percent by weight of surfactant, 0.05 to 5 percent by weight of biocide and 0.1 to 10 percent by weight of pH control agents (col. 6 lines 61-66). The reference discloses that the ink composition is degassed prior to filling. During the degassing process, ink is pumped to a degassing unit and cycled until the

ink reaches the desired gas level. The degassing unit may incorporate known mechanisms for removing dissolved gases from an ink. These methods include but are not limited to physical processes such as boiling and evacuation, and chemical processes such as incorporating gas absorbents in the ink composition (col. 14 lines 46-64). The ink is incorporated into a collapsible bag to allow the low level of dissolved gas ink the ink composition to be maintained during printing (col. 14 line 65-col. 15 line 10). The composition as taught by Blease et al appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blease et al (US Patent 6,585,362).

Blease et al is described above, but fails to specifically exemplify the use of vacuum thin film and inert gases as deoxidation methods as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the specific deoxidation methods as claimed by applicant as Blease et al also discloses that known mechanisms for removing dissolved gases from an ink compositions including but are not limited to physical processes such as boiling and evacuation, and chemical processes such as incorporating gas absorbents in the ink composition which is broad enough to encompass vacuum thin film and inert gases as deoxidation methods absence tangible evidence to the contrary.

Conclusion

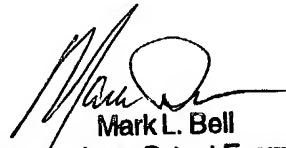
The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF



Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700